

CLAIMS

1. A data storage system using network, having functions of storing data sent from a terminal device via a network and returning saved data via
5 a network in accordance with a request from a terminal device,

said data storage system comprising:

a removable storage medium (11, 21), installable to a terminal device (10, 20); storing means (12, 22), built into the terminal device; and a data storage device (100), connected to the terminal device via a first network
10 (N1);

the data storage device (100) having a first data storage unit (110), a second data storage unit (120), and a data transferring unit (130),

the storing means (12, 22) having functions of performing, based on an instruction of an operator, a data deposition process of uploading data to
15 be deposited to the data storage device (100) via the first network (N1) and a data withdrawal process of downloading data to be withdrawn from the data storage device (100) via the first network (N1), wherein, in performing the data deposition process, the data to be deposited are uploaded to one of either the first data storage unit (110) or the second data storage unit (120)
20 in accordance with the operator's selection,

the data transferring unit (130) having functions of performing a data stocking process, whereby, when data to be deposited have been uploaded to the second data storage unit (120) by the data deposition process, the data to be deposited are forwarded to an external storage site
25 (210, 220, 230), accessible from the data storage device (100) via a second network (N2), the data to be deposited stored in the second data storage unit (120) are deleted, and management information, including information specifying the external storage site (210, 220, 230), is sent to a terminal device (10, 20) that is executing the data deposition process, and a data
30 delivery process, whereby, when a request to download data to be withdrawn from the second data storage unit (120) is made by the data withdrawal process, management information is received from a terminal device (10, 20) that is executing the data withdrawal process, data stored in an external storage site (210, 220, 230) specified by the received
35 management information are forwarded to the second data storage unit (120), and the data in the second data storage unit (120) are deleted upon

being downloaded, and

the storing means (12, 22) furthermore having functions of executing a process of storing, as an execution result of the data deposition process, management information sent from the data storage device (100) as
5 “management information concerning a data to be deposited” into the removable storage medium (11, 21) and a process of sending, in executing the data withdrawal process, “management information concerning a data to be withdrawn” that had been stored in the removable storage medium (11, 21) to the data storage device (100).

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2. The data storage system using network according to Claim 1, wherein:

the data transferring unit (130) has functions of preparing and saving a list of respective individual data for which the data stocking
15 process has been completed and presenting the list to a terminal device (10, 20) that performs the data withdrawal process, and

the storing means (12, 22) has a function of providing to the data transferring unit (130) a request to download specific data, selected from the list by a selection operation by an operator, in performing the data
20 withdrawal process.

3. The data storage system using network according to Claim 1 or 2, wherein:

the storing means (12, 22) has a function of displaying the first data
25 storage unit (110) and the second data storage unit (120) as folders (F1, F2, and F3) on a display screen of a terminal device (10, 20) and performs the data deposition process or the data withdrawal process based on an instruction operation, provided from an operator, for moving data to a folder or from a folder.

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4. The data storage system using network according to Claim 3, wherein:

the data transferring unit (130), in performing the data delivery process, stores data to be withdrawn, which had been forwarded from an
35 external storage site (210, 220, 230), into a folder (F3) corresponding to the second data storage unit (120) and then downloads said data.

5. The data storage system using network according to any one of Claims 1 through 4, wherein:

5 data transferring unit (130) performs, after completion of the data stocking process or the data delivery process, a process of deleting management information used in the completed process from inside the data storage device (100).

10 6. The data storage system using network according to any one of Claims 1 through 5, wherein:

the data transferring unit (130) has a function of sending, after completion of the data stocking process, an e-mail indicating, to a terminal device (10, 20), completion of a storage of data to be deposited.

15 7. The data storage system using network according to any one of Claims 1 through 6, wherein:

the storing means (12, 22) has a function of designating an external storage site (210, 220, 230) in performing the data deposition process by uploading data to be deposited to the second data storage unit (120), and

20 the data transferring unit (130) forwards the data to be deposited to the designated external storage site.

8. The data storage system using network according to any one of Claims 1 through 7, wherein:

25 as information for specifying an external storage site (210, 220, 230), a URL of the external storage site is used.

9. The data storage system using network according to any one of Claims 1 through 8, wherein:

30 the data transferring unit (130), in performing the data stocking process, performs a process of dividing data (D) to be deposited into a plurality of partition files (D1, D2, D3) and forwarding the respective individual partition files to different storage sites (L1, L2, L3) and a process of preparing management information that specify the plurality of storage sites, and, in performing the data delivery process, restores an original data
35 (D) by unifying the respective partition files (D1, D2, D3) stored in the

plurality of storage sites (L1, L2, L3) specified by the management information and downloads the restored data as data to be withdrawn.

10. The data storage system using network according to Claim 9,
5 wherein:

the data transferring unit (130), in performing the data stocking process, performs a process of preparing management information including information indicating a dividing method that is carried out, and, in performing the data delivery process, executes a unifying process that is in
10 accordance with a method included in the management information.

11. The data storage system using network according to any one of Claims 1 through 10, wherein:

the data transferring unit (130), in performing the data stocking
15 process, performs an encryption process on data to be deposited, a process of forwarding encrypted data to an external storage site, and a process of preparing management information including information indicating a method of the encryption process, and, in performing the data delivery process, executes a decryption process that is in accordance with a method
20 included in the management information.

12. The data storage system using network according to any one of Claims 1 through 11, wherein:

a plurality of data storage devices (310, 320) are provided and data,
25 stored in any of predetermined storage sites (410, 420, 430), are enabled to be downloaded to a terminal device (N3, N4) via any of the data storage devices (310, 320).

13. The data storage system using network according to any one of
30 Claims 1 through 12, wherein:

the storing means (12, 22) is realized by program installed in a computer making up the terminal device (10, 20) and an IC card is used as the removable storage medium (11, 12).

35 14. The data storage system using network according to any one of Claims 1 through 13, wherein:

a LAN is used as the first network (N1) and the internet is used as the second network (N2).

15. A program, making a computer function as the storing means (12,
5 22) or data transferring unit (130) of the data storage system using network according to any one of Claims 1 through 14, or a computer readable medium recording said program.